

Juniata Shops, Blacksmith Shop No. 2
East of Fourth Avenue between First and Second streets
Altoona
Blair County
Pennsylvania

HAER No. PA-232-B

HAER
PA,
7-ALTO,
4-B=

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

JUNIATA SHOPS, BLACKSMITH SHOP NO. 2

HAER No. PA-232-B

Location: East of Fourth Avenue between First and Second streets, Altoona, Blair County, Pennsylvania

USGS Quad: Altoona, Pennsylvania (1:24000)
UTM: 17 E.721420 N.4489900

Date of Construction: 1904, 1918

Builder: Pennsylvania Railroad

Present Owner: Conrail

Present Use: Manufacturing Railroad Rolling Stock

Significance: Presently used by Conrail for storage, Blacksmith Shop No. 2 retains much of its early to mid-nineteenth century equipment, including several gas-fired furnaces.

Project Information: This project was undertaken by HAER in conjunction with America's Industrial Heritage Project as part of an architectural survey covering a nine-county region in Southwestern Pennsylvania, Randall Cooley, Director. See HAER No. PA-108, Pennsylvania Railroad, Altoona Works, Altoona, Blair County, Pennsylvania for further project information and documentation.

Compiler: Peter Stott, Historian
Gray Fitzsimons, Editor

HAER
PA.
7-ALTO,
4-B-

History:

The company's annual report for 1903 makes passing reference to large expenditures made in the extension of the Juniata Shops; this is probably referring to the construction of the Second Blacksmith Shop, which is shown under construction in a photograph taken that year (Altoona Public Library - #5,053). Originally 210' x 80' in plan, the building was extended in 1918 to its present length of 403'.

In 1936 the shop contained six large furnaces used in conjunction with the steam hammers, eighteen smaller furnaces for swing belt hammers and forging machines, six car-bottom furnaces, and four cylindrical vertical furnaces for various kinds of heat treatment operations. Annealing, prior to machining, was accomplished in the car-bottom furnaces. Juniata's heat treating plant was located at the western end of the building, and Works Manager, Fred G. Grimshaw, noted in 1945 that the two blacksmith shops provided much of the forging and heat treatment for the PRR's locomotive parts. Presently used by Conrail for storage Blacksmith Shop No. 2 retains much of its early to mid-nineteenth equipment, including several gas-fired furnaces. The most recent change of note is the roof sheathing installed by the PRR in 1967. An overhead crane at the shop's west end is the only active piece of equipment in the building.

Sources:

- Baxter, W.W.. "Pennsylvania Railroad Reconstructs Juniata Shops," Railway Review 30 (January 1926), pp. 226-231.
Grimshaw, Fred G.. "The History of the Pennsylvania Railroad Company in Blair County," Chapter XXII in George A. Wolf, ed., Blair County's First Hundred Years, 1846-1946 (Altoona: The Mirror Press, 1946).
Nealey, J.B. "Forging and Heat Treating Locomotive Parts," Iron Age 137 (19 March 1936), pp. 38-42.
Pennsylvania Railroad Company. 57th Annual Report of the Board of Directors of the Pennsylvania Railroad Company, p. 19.
Sell, Jesse C. Twentieth Century History of Altoona and Blair County, Pennsylvania and Representative Citizens (Chicago: Richmond-Arnold Publishing Co., 1911), pp. 332-336.
Warren, Frederic Blount. "A Railroad University: Altoona and its Methods," Scientific American Supplement 63 (29 June 1907), pp. 26323-5.